

AN 2004:473453 CAPLUS  
 DN 141:44857  
 ED Entered STN: 11 Jun 2004  
 TI Photosensitive resin composition comprising halogen-free  
 colorant  
 IN Oka, Hidetaka; Adam, Jean-Marie  
 PA Ciba Specialty Chemicals Holding Inc., Switz.  
 SO PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)

FAN.CNT 1

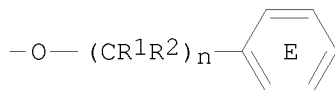
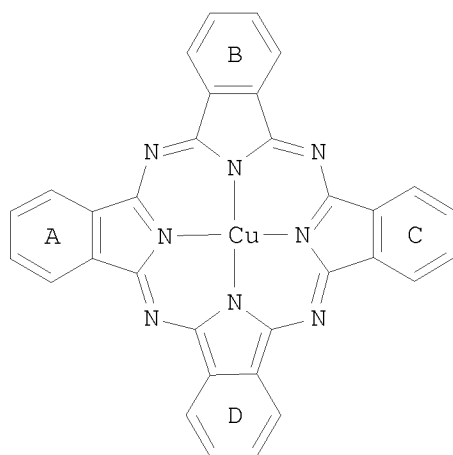
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004049070	A2	20040610	WO 2003-EP50849	20031119
	WO 2004049070	A3	20040722		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2507471	A1	20040610	CA 2003-2507471	20031119
	AU 2003298293	A1	20040618	AU 2003-298293	20031119
	EP 1565789	A2	20050824	EP 2003-796025	20031119
	EP 1565789	B1	20091230		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	BR 2003016657	A	20051018	BR 2003-16657	20031119
	CN 1717627	A	20060104	CN 2003-80104325	20031119
	CN 100549825	C	20091014		
	JP 2006508381	T	20060309	JP 2004-554539	20031119
	JP 4390707	B2	20091224		
	AT 453877	T	20100115	AT 2003-796025	20031119
	US 20050282923	A1	20051222	US 2005-535373	20050519
	MX 2005005682	A	20050726	MX 2005-5682	20050527
	IN 2005CN01406	A	20070803	IN 2005-CN1406	20050624
	IN 219755	A1	20080704		
PRAI	EP 2002-406035	A	20021128		
	WO 2003-EP50849	W	20031119		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004049070	IPCI	G03F0007-027 [ICM,7]
	IPCR	G03F0007-038 [I,C*]; G03F0007-038 [I,A]; G03F0007-09 [N,C*]; G03F0007-105 [N,A]; H05K0001-02 [N,C*]; H05K0001-02 [N,A]; H05K0003-00 [N,C*]; H05K0003-00 [N,A]; H05K0003-28 [I,C*]; H05K0003-28 [I,A]
	ECLA	G03F007/038; H05K003/28G2; S03F007:105; T05K001:02D4; T05K003:00N2
CA 2507471	IPCI	G03F0007-027 [ICM,7]
	IPCR	G03F0007-038 [I,C*]; G03F0007-038 [I,A]; G03F0007-09 [N,C*]; G03F0007-105 [N,A]; H05K0001-02 [N,C*]; H05K0001-02 [N,A]; H05K0003-00 [N,C*]; H05K0003-00 [N,A]; H05K0003-28 [I,C*]; H05K0003-28 [I,A]

	ECLA	G03F007/038; H05K003/28G2; S03F007:105; T05K001:02D4; T05K003:00N2
AU 2003298293	IPCI	G03F0007-027 [ICM,7]
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	ECLA	G03F007/038; H05K003/28G2; S03F007:105; T05K001:02D4; T05K003:00N2
EP 1565789	IPCI	G03F0007-027 [I,C]; G03F0007-027 [I,A]
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BR 2003016657	IPCI	G03F0007-027 [ICM,7]
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CN 1717627	IPCI	G03F0007-027 [I,A]; G03F0007-027 [I,C]; G03F0007-027 [I,A]
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JP 2006508381	IPCI	G03F0007-004 [I,A]; G03F0007-40 [I,A]; H05K0003-28 [I,A]; G03F0007-027 [N,A]; G03F0007-004 [I,A]; G03F0007-40 [I,A]; H05K0003-28 [I,A]; G03F0007-027 [N,A]
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	FTERM	2H025/AB15; 2H025/AC01; 2H025/AD01; 2H025/BC32; 2H025/BC42; 2H025/BC74; 2H025/CA01; 2H025/CA28; 2H025/CB13; 2H025/CB14; 2H025/CB43; 2H025/CB52; 2H025/CC20; 2H025/FA17; 2H025/FA29; 2H096/AA26; 2H096/BA05; 2H096/BA20; 2H096/EA02; 2H096/GA08; 2H096/HA01; 2H096/JA04; 5E314/AA27; 5E314/AA32; 5E314/AA45; 5E314/BB02; 5E314/CC01; 5E314/FF01; 5E314/GG08; 5E314/GG11
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US 20050282923	IPCI	C08K0003-00 [ICM,7]
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 [N,A]; H05K0003-28 [I,C\*]; H05K0003-28 [I,A]  
 NCL 522/075.000  
 ECLA G03F007/038; H05K003/28G2; S03F007:105; T05K001:02D4;  
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 T05K003:00N2  
 IN 2005CN01406 IPCI H05K0001-02 [ICM,7]  
 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
 OS MARPAT 141:44857  
 GI



I

AB The present invention relates to a photosensitive resin composition for solder resists comprising as a component (A) a green colorant of the formula I (rings A, B, C and D are substituted by hydroxy or by moiety; R, R2 = H, C1-4-alkyl; n = 0-3; ring E = unsubstituted or substituted by C1-6-alkyl, C1-6-alkoxy, hydroxy, NHCOR3, NHSO2, R4 or SO2NHR5; R3, R4, R5 = C1-4-alkyl; Ph); as a component (B) an alkali soluble oligomer or polymer reactive or unreactive; as a component (C) a polymerizable monomer; as a component (D) a photoinitiator; as a component (E) an epoxy compound; and also, if desired, as a component (F) further additives. The photosensitive composition can be used as solder resist, etching resist or plating resist in the manufacture of printed circuit boards. The inventive solder resist comprising a single green pigment that maintains qualities required as a green coloring material, such as clear hue, good weather- and heat resistance and that is satisfactory at the same time in the points of environmental pollution, has not been found yet in the present state of the art.

ST photoresist solder resist printed circuit board compn photosensitive resin

IT Solder resists  
(photosensitive resin composition comprising halogen-free  
colorant)

IT 5495-84-1, Quantacure ITX 20468-22-8 21707-33-5  
29570-58-9, DPHA 29696-46-6 71868-10-5, Irgacure 907 155575-69-2, GY  
1180 227101-11-3 290821-67-9 667865-45-4 671791-90-5, EA-6340  
RL: TEM (Technical or engineered material use); USES (Uses)  
(photosensitive resin composition comprising halogen-free  
colorant)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE CITED REFERENCES

(1) Anon; US 20020136986 A1

(2) Anon; US 5009982 A CAPLUS

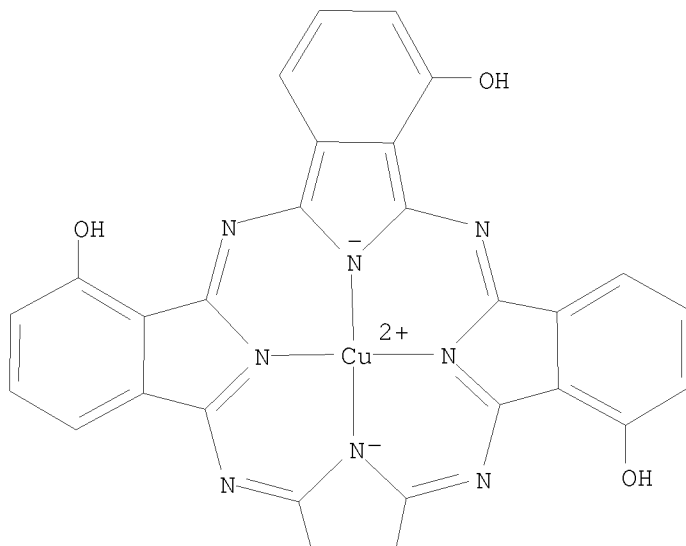
(3) Anon; US 5789137 A CAPLUS

IT 20468-22-8 21707-33-5  
RL: TEM (Technical or engineered material use); USES (Uses)  
(photosensitive resin composition comprising halogen-free  
colorant)

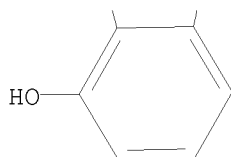
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CN Copper, [29H,31H-phthalocyanine-1,8,15,22-tetrolato(2-)-  
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI) (CA INDEX  
NAME)

PAGE 1-A



PAGE 2-A



RN 21707-33-5 CAPLUS

CN Copper, [29H,31H-phthalocyanine-2,9,16,23-tetrolato(2-)-  
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI) (CA INDEX  
NAME)

